

shardna.ST25.4.15.05.txt  
SEQUENCE LISTING

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<120> Diagnostic and therapeutic means for kidney stone related pathologies

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<170> PatentIn version 3.1、

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shardna.ST25.4.15.05.txt

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<213> Homo sapiens

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Phe Glu Asn Val Ala Val Cys Leu Pro Leu Arg Cys Pro Arg Cys Gly  
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Asp His Thr Arg Phe Arg Ser Leu Ser Ser Leu Arg Ala His Leu Glu  
35 40 45

Phe Ser His Ser Tyr Glu Glu Arg Thr Leu Leu Thr Lys Cys Ser Leu  
50 55 60

Phe Pro Ser Leu Lys Asp Thr Asp Leu Val Thr Ser Ser Glu Leu Leu  
65 70 75 80

Lys Pro Gly Lys Leu Gln Ser Ser Gly Asn Val Val Lys Gln Lys Pro  
85 90 95

Ser Tyr Val Asn Leu Tyr Ser Ile Ser His Glu His Ser Lys Asp Arg  
100 105 110

Lys Pro Phe Glu Val Val Ala Glu Arg Pro Val Ser Tyr Val Gln Thr  
115 120 125

Tyr Thr Ala Met Asp Leu His Ala Asp Ser Leu Asp Gly Thr Arg Ser  
130 135 140

Gly Pro Gly Leu Pro Thr Ser Asp Thr Lys Ala Ser Phe Glu Ala His  
145 150 155 160

Val Arg Glu Lys Phe Asn Arg Met Val Glu Ala Val Asp Arg Thr Ile  
165 170 175

Glu Lys Arg Ile Asp Lys Leu Thr Lys Glu Leu Ala Gln Lys Thr Ala  
180 185 190

Glu Leu Leu Glu Val Arg Ala Ala Phe Val Gln Leu Thr Gln Lys Lys  
195 200 205

Gln Glu Val Gln Arg Arg Glu Arg Ala Leu Asn Arg Gln Val Asp Val  
210 215 220

shardna.ST25.4.15.05.txt

Ala Val Glu Met Ile Ala Val Leu Arg Gln Arg Leu Thr Glu Ser Glu  
 225 230 235 240

Glu Glu Leu Leu Arg Lys Glu Glu Glu Val Val Thr Phe Asn His Phe  
 245 250 255

Leu Glu Ala Ala Ala Glu Lys Glu Val Gln Gly Lys Ala Arg Leu Gln  
 260 265 270

Asp Phe Ile Glu Asn Leu Leu Gln Arg Val Glu Leu Ala Glu Lys Gln  
 275 280 285

Leu Glu Tyr Tyr Gln Ser Gln Gln Ala Ser Gly Phe Val Arg Asp Leu  
 290 295 300

Ser Gly His Val Leu Thr Asp Ile Ser Ser Asn Arg Lys Pro Lys Cys  
 305 310 315 320

Leu Ser Arg Gly His Pro His Ser Val Cys Asn His Pro Asp Leu Lys  
 325 330 335

Ser His Phe His Pro Lys Gly Arg Asn His Leu Lys Lys Ala Lys Asp  
 340 345 350

Asp Arg Ala Ser Met Gln Pro Ala Lys Ala Ile His Glu Gln Ala Glu  
 355 360 365

Ser Ser Arg Asp Leu Cys Arg Pro Pro Lys Lys Gly Glu Leu Leu Gly  
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Phe Gly Arg Lys Gly Asn Ile Arg Pro Lys Met Ala Lys Lys Lys Pro  
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Thr Ala Ile Val Asn Ile Ile  
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<212> PRT

<213> Homo sapiens

<400> 34

Met Gln Gln Lys Ala Phe Glu Glu Ser Arg Tyr Pro Trp Gln Glu Ser  
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shardna.ST25.4.15.05.txt

Phe Glu Asn Val Ala Val Cys Leu Pro Leu Arg Cys Pro Arg Cys Gly  
 20 25 30  
 Asp His Thr Arg Phe Arg Ser Leu Ser Ser Leu Arg Ala His Leu Glu  
 35 40 45  
 Phe Ser His Ser Tyr Glu Glu Arg Thr Leu Leu Thr Lys Cys Ser Leu  
 50 55 60  
 Phe Pro Ser Leu Lys Asp Thr Asp Leu Val Thr Ser Ser Glu Leu Leu  
 65 70 75 80  
 Lys Pro Gly Lys Leu Gln Ser Ser Gly Asn Val Val Lys Gln Lys Pro  
 85 90 95  
 Ser Tyr Val Asn Leu Tyr Ser Ile Ser His Glu His Ser Lys Asp Arg  
 100 105 110  
 Lys Pro Phe Glu Val Val Ala Glu Arg Pro Val Ser Tyr Val Gln Thr  
 115 120 125  
 Tyr Thr Ala Met Asp Leu His Ala Asp Ser Leu Asp Gly Thr Arg Ser  
 130 135 140  
 Gly Pro Gly Leu Pro Thr Ser Asp Thr Lys Ala Ser Phe Glu Ala His  
 145 150 155 160  
 Val Arg Glu Lys Phe Asn Arg Met Val Glu Ala Val Asp Arg Thr Ile  
 165 170 175  
 Glu Lys Arg Ile Asp Lys Leu Thr Lys Glu Leu Ala Gln Lys Thr Ala  
 180 185 190  
 Glu Leu Leu Glu Val Arg Ala Ala Phe Val Gln Leu Thr Gln Lys Lys  
 195 200 205  
 Gln Glu Val Gln Arg Arg Glu Arg Ala Leu Asn Arg Gln Val Asp Val  
 210 215 220  
 Ala Val Glu Met Ile Ala Val Leu Arg Gln Arg Leu Thr Glu Ser Glu  
 225 230 235 240  
 Glu Glu Leu Leu Arg Lys Glu Glu Glu Val Val Thr Phe Asn His Phe  
 245 250 255  
 Leu Glu Ala Ala Ala Glu Lys Glu Val Gln Gly Lys Ala Arg Leu Gln

260

Asp Phe Ile Glu Asn Leu Leu Gln Arg Val Glu Leu Ala Glu Lys Gln  
275 280 285

Leu Glu Tyr Tyr Gln Ser Gln Gln Ala Ser Gly Phe Val Arg Asp Leu  
290 295 300

Ser Gly His Val Ser Trp Lys Gly Ala Gly Glu Ala Arg Leu Val Cys  
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Gln Asn Asp Leu Glu Leu Glu Glu Ser Ala Ile Val Glu  
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<212> PRT

<213> Homo sapiens

<400> 35

Met Gln Gln Lys Ala Phe Glu Glu Ser Arg Tyr Pro Trp Gln Glu Ser  
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Phe Glu Asn Val Ala Val Cys Leu Pro Leu Arg Cys Pro Arg Cys Gly  
20 25 30

Asp His Thr Arg Phe Arg Ser Leu Ser Ser Leu Arg Ala His Leu Glu  
35 40 45

Phe Ser His Ser Tyr Glu Glu Arg Thr Leu Leu Thr Lys Cys Ser Leu  
50 55 60

Phe Pro Ser Leu Lys Asp Thr Asp Leu Val Thr Ser Ser Glu Leu Leu  
65 70 75 80

Lys Pro Gly Lys Leu Gln Ser Ser Gly Asn Val Val Lys Gln Lys Pro  
85 90 95

Ser Tyr Val Asn Leu Tyr Ser Ile Ser His Glu His Ser Lys Asp Arg  
100 105 110

Lys Pro Phe Glu Val Val Ala Glu Arg Pro Val Ser Tyr Val Gln Thr  
115 120 125

## shardna.ST25.4.15.05.txt

Tyr Thr Ala Met Asp Leu His Ala Asp Ser Leu Asp Gly Thr Arg Ser  
 130 135 140  
 Gly Pro Gly Leu Pro Thr Ser Asp Thr Lys Ala Ser Phe Glu Ala His  
 145 150 155 160  
 Val Arg Glu Lys Phe Asn Arg Met Val Glu Ala Val Asp Arg Thr Ile  
 165 170 175  
 Glu Lys Arg Ile Asp Lys Leu Thr Lys Glu Leu Ala Gln Lys Thr Ala  
 180 185 190  
 Glu Leu Leu Glu Val Arg Ala Ala Phe Val Gln Leu Thr Gln Lys Lys  
 195 200 205  
 Gln Glu Val Gln Arg Arg Glu Arg Ala Leu Asn Arg Gln Val Asp Val  
 210 215 220  
 Ala Val Glu Met Ile Ala Val Leu Arg Gln Arg Leu Thr Glu Ser Glu  
 225 230 235 240  
 Glu Glu Leu Leu Arg Lys Glu Glu Glu Val Val Thr Phe Asn His Phe  
 245 250 255  
 Leu Glu Ala Ala Ala Glu Lys Glu Val Gln Gly Lys Ala Arg Leu Gln  
 260 265 270  
 Asp Phe Ile Glu Asn Leu Leu Gln Arg Val Glu Leu Ala Glu Lys Gln  
 275 280 285  
 Leu Glu Tyr Tyr Gln Ser Gln Gln Ala Ser Gly Phe Val Arg Asp Leu  
 290 295 300  
 Ser Gly His Val Ser Trp Lys Gly Ala Gly Glu Ala Arg Leu Val Cys  
 305 310 315 320  
 Gln Asn Asp Leu Glu Leu Glu Ile Phe Gly His Ile Asn His His Leu  
 325 330 335  
 Ser Gly Leu Lys Asp Ser His Cys Leu Val Phe Leu Gln Ala Pro Pro  
 340 345 350  
 Val Pro Trp Ile Ile Leu Ala Ser Phe Leu Trp Ile Leu Gly Asn Pro  
 355 360 365  
 Trp Thr Ser Ser Thr Ala Thr Ala Gly Phe Ser Gln Ile Trp Val Leu  
 370 375 380

shardna.ST25.4.15.05.txt

Phe Pro Phe Cys Gly Gly Thr Phe His His Asn Glu Lys Asp Val Leu  
385 390 395 400

Gly Leu Gln Asp Phe Glu Arg Glu Ser Val Ser Thr Ser Gln Ser Arg  
405 410 415

Asn Ile Ser Leu Leu Thr Leu Gly Gln Leu Gln Asn Cys Val Ile Gly  
420 425 430

Lys Leu Thr Ile Ile Asp Leu Leu Thr Glu His Leu Leu Gly Val Arg  
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His Gly Val Ile Cys Phe Pro Trp Gly Leu Pro Ser Ser Ser  
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<210> 36

<211> 216

<212> PRT

<213> Homo sapiens

<400> 36

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Thr Glu Arg Asn Gln Thr Asp Lys Asn Pro Cys Leu His Gly Ala Tyr  
20 25 30

Leu Gln Leu Arg Glu Thr Val Lys Asn Lys Ser Thr His Leu Lys Lys  
35 40 45

Pro Leu Met Lys Gln Ala Pro Pro Trp Lys Asp His Leu Ala Phe Gln  
50 55 60

Pro Leu His Pro Ala Glu Arg Lys Thr Gln Val Trp Arg Trp Gln Ser  
65 70 75 80

Gly Asn Ser Ser Asp Leu Glu Thr Thr Ser Ser Ala Ser Pro Trp Pro  
85 90 95

Thr Gly Ser Asn Arg Asp Val Val Leu Asn Thr Leu Ala Glu Ser Cys  
100 105 110

Cys Gly Leu Ser Glu Leu Ile Thr Ala Pro Pro Tyr Ala Gly Val Ser  
115 120 125

shardna.ST25.4.15.05.txt

Ile	Gln	Gly	Phe	Ser	Gln	Ile	Trp	Val	Leu	Phe	Pro	Phe	Cys	Gly	Gly
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Thr	Phe	His	His	Asn	Glu	Lys	Asp	Val	Leu	Gly	Leu	Gln	Asp	Phe	Glu
145					150					155					160
Arg	Glu	Ser	Val	Ser	Thr	Ser	Gln	Ser	Arg	Asn	Ile	Ser	Leu	Leu	Thr
				165					170					175	
Leu	Gly	Gln	Leu	Gln	Asn	Cys	Val	Ile	Gly	Lys	Leu	Thr	Ile	Ile	Asp
			180					185					190		
Leu	Leu	Thr	Glu	His	Leu	Leu	Gly	Val	Arg	His	Gly	Val	Ile	Cys	Phe
		195					200					205			
Pro	Trp	Gly	Leu	Pro	Ser	Ser	Ser								
210						215									